



CONNECTED
NATION®

COMMUNITY ENGAGEMENTS & PARTNERSHIPS

CREATING CONNECTIONS FOR BROADBAND EXPANSION



ACCESS



ADOPTION



USE

Chris Pedersen
Director, Program Outreach

WHAT THE NATIONAL BROADBAND MAP TELLS US...

- While access to basic broadband (3 Mbps) is over 95% of households, access to networks with download speeds of 50 Mbps or greater is at 45%
- Communities are different – 25.4% of Iowans have access to fiber, but only 1.3% of Nevadans
- Mobility is a significant economic opportunity, yet challenges in deployment remain
- Many of our nation's community anchor institutions remain unprepared for the broadband future

We need active, public-private partnerships to engage communities and to identify and solve community broadband challenges



ACCESS



ADOPTION



USE

CORE COMPONENTS OF THE CONNECTED APPROACH

ACCESS

Is the infrastructure here?

ADOPTION

Do residents and institutions use the technology?

USE

Are residents and institutions using technology to improve the quality of life?

ACCESS

Is the infrastructure here?



Coverage

In areas where multiple broadband providers offer service, this platform composite map stacks coverage display layers in the order presented below.

- Symbology**
- City
 - Primary Road
 - Secondary Road
 - Municipality Boundary
 - Water
 - National Lands
 - Fiber Broadband Available
 - Cable Broadband Available
 - DSL Broadband Available
 - Fixed Wireless Broadband Available
 - Mobile Wireless Broadband Available*
 - Unserviced Areas



Speeds

- Leyenda**
- Ciudad
 - Carretera Principal
 - Carretera Secundaria
 - Limites Municipales
 - Agua
 - Tierras Nacionales
 - Banda ancha de nivel 11 (Más de 1 Gbps)*
 - Banda ancha de nivel 10 (100 Mbps a < 1 Gbps)*
 - Banda ancha de nivel 9 (50 Mbps a < 100 Mbps)*
 - Banda ancha de nivel 8 (25 Mbps a < 50 Mbps)*
 - Banda ancha de nivel 7 (10 Mbps a < 25 Mbps)*
 - Banda ancha de nivel 6 (6 Mbps a < 10 Mbps)*
 - Banda ancha de nivel 5 (3 Mbps a < 6 Mbps)
 - Banda ancha de nivel 4 (1.5 Mbps a < 3 Mbps)
 - Banda ancha de nivel 3 (768 kbps a < 1.5 Mbps)
 - Datos insuficientes

Anchor Institutions

Maps/Data

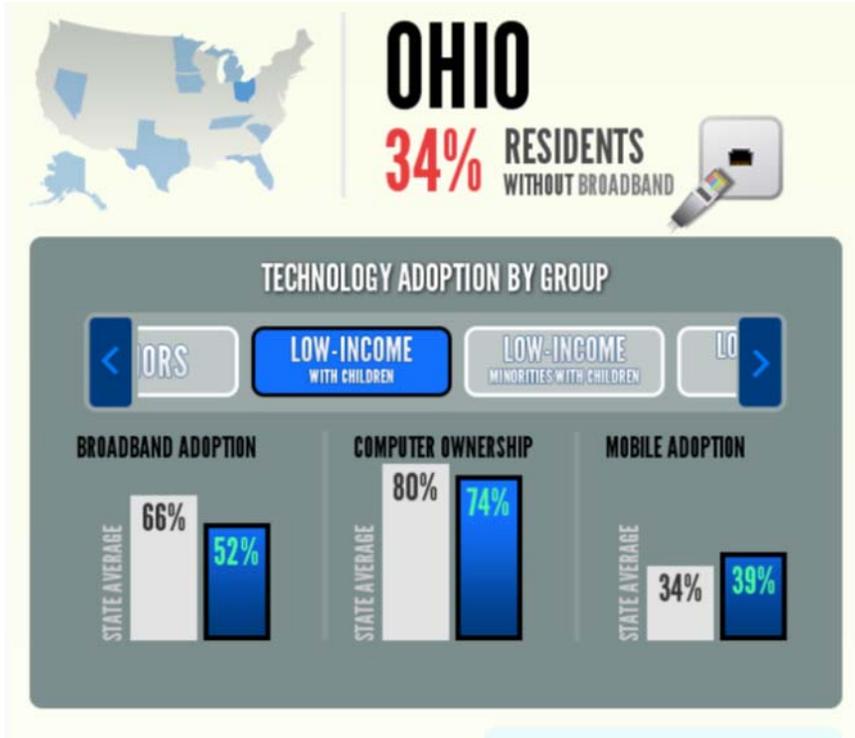
- 8% 100% Clear Map
- ACCESS
- ADOPTION
- USE
- Schools K-12
- Libraries
- Medical/Healthcare Facilities
- Public Safety Facilities
- Universities/Colleges (Post-Secondary)
- Other Community Support-Good

TEODORO ROOSEVELT

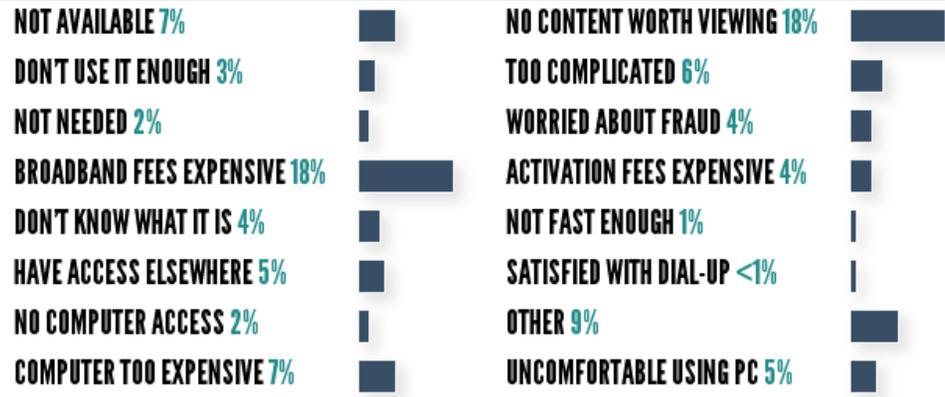
- Name: TEODORO ROOSEVELT
- Address: PARCELAS WILLIAM FUE BO PALMAS CATANO PR 00962
- Latitude: 18.437759
- Longitude: -66.151952
- CAI Category: School K-12
- Broadband: Yes
- Technology: Symmetric xDSL
- Download Speed: Unknown

ADOPTION

Do residents and institutions use the technology?



What is the main reason you decided NOT to subscribe to broadband?



Source: 2011 Connect Ohio Residential Technology Assessment
www.connectohio.org

USE

Are residents and institutions using technology to improve the quality of life?

BROADBAND ACTIVITIES



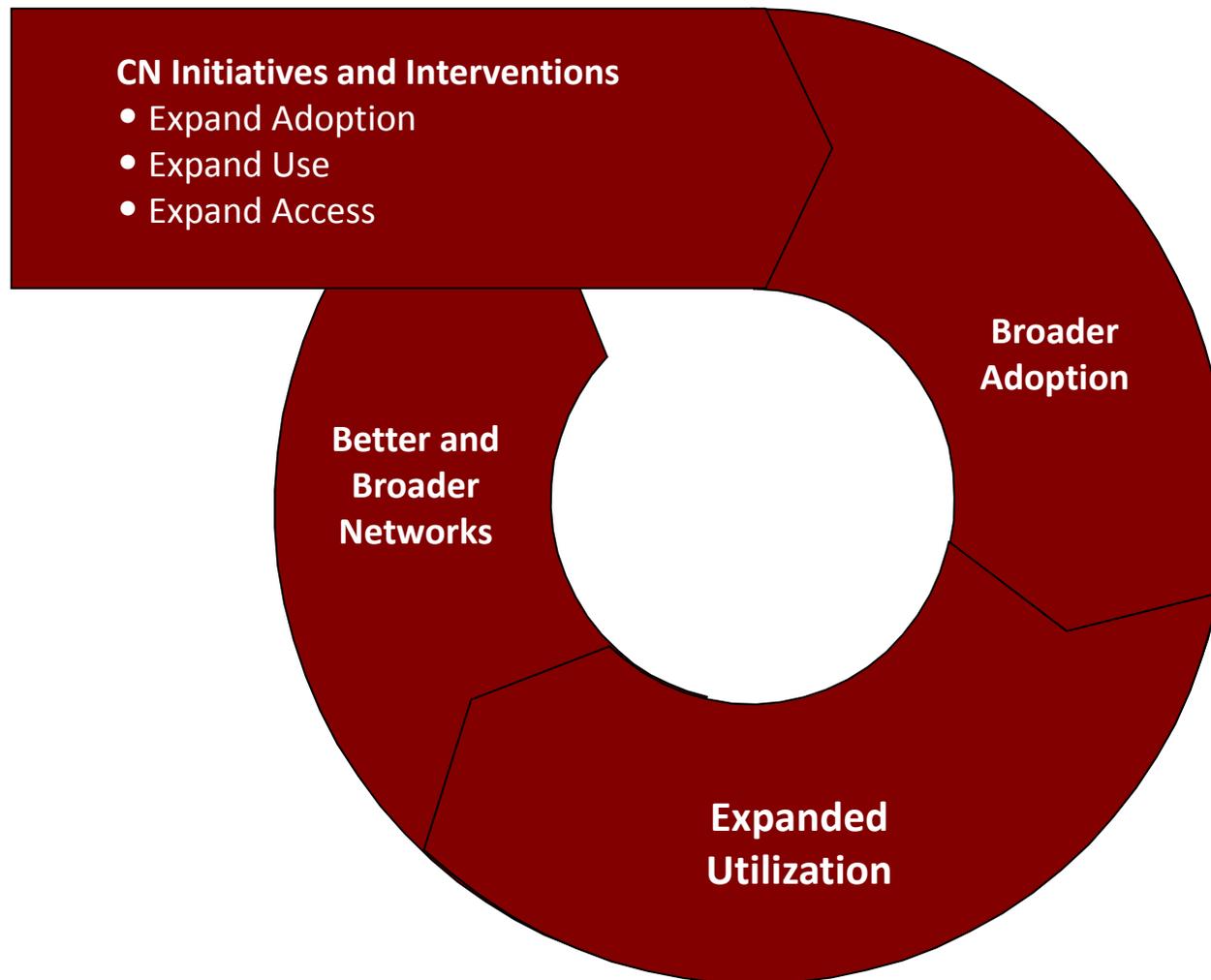
BROADBAND ACTIVITIES



Source: 2011 Connect Ohio Residential Technology Assessment www.connectohio.org



BROADBAND CATALYSTS FOR CHANGE



NATIONAL BENCHMARKS

Universal Fixed Access

“Every American should have affordable access to robust broadband service.”
National Broadband Plan, Goal No. 3

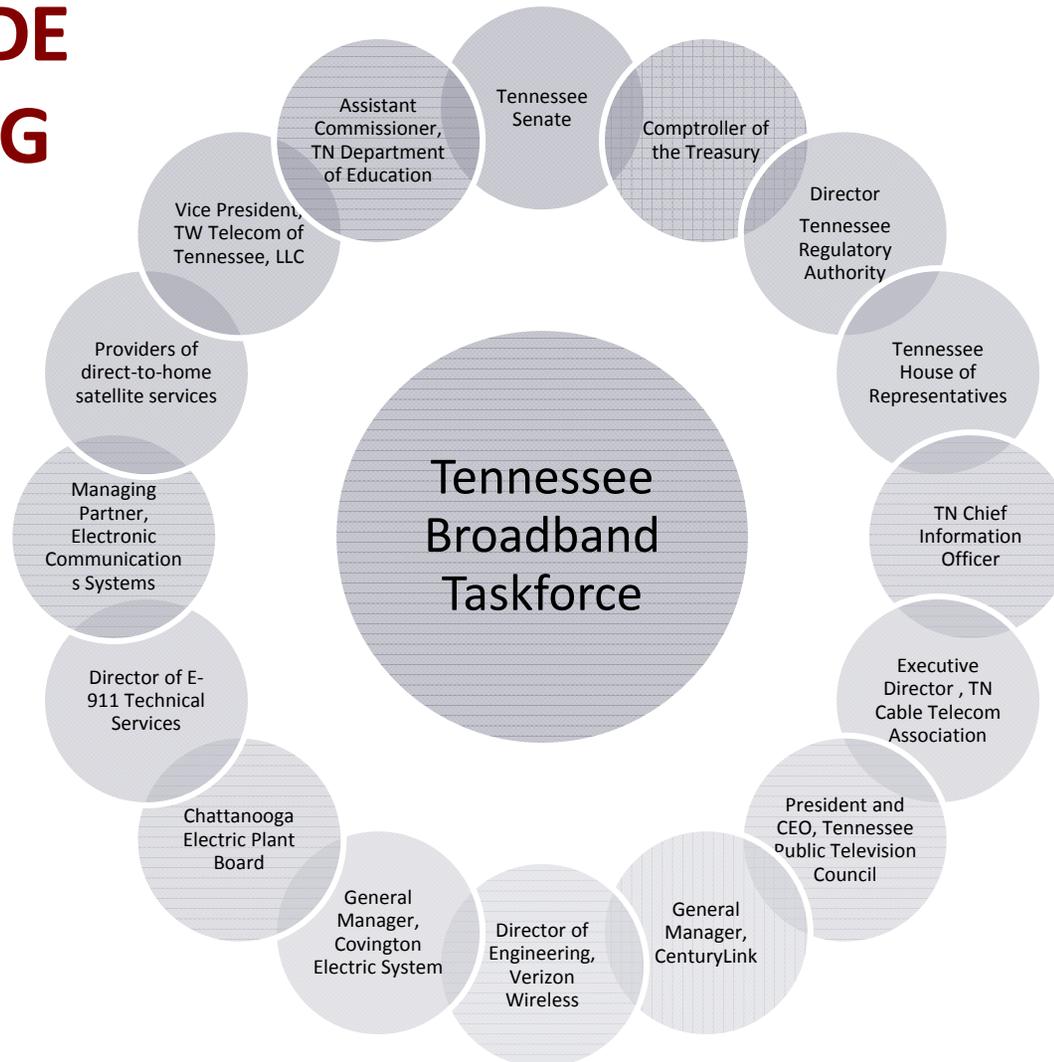
Mobile Broadband

“Within the next five years, we’ll make it possible for businesses to deploy the next generation of high-speed wireless coverage to 98% of all Americans.”
President Obama, State of the Union Address, Jan. 25, 2011, and Wireless Innovation Initiative

Fixed Access for Tomorrow

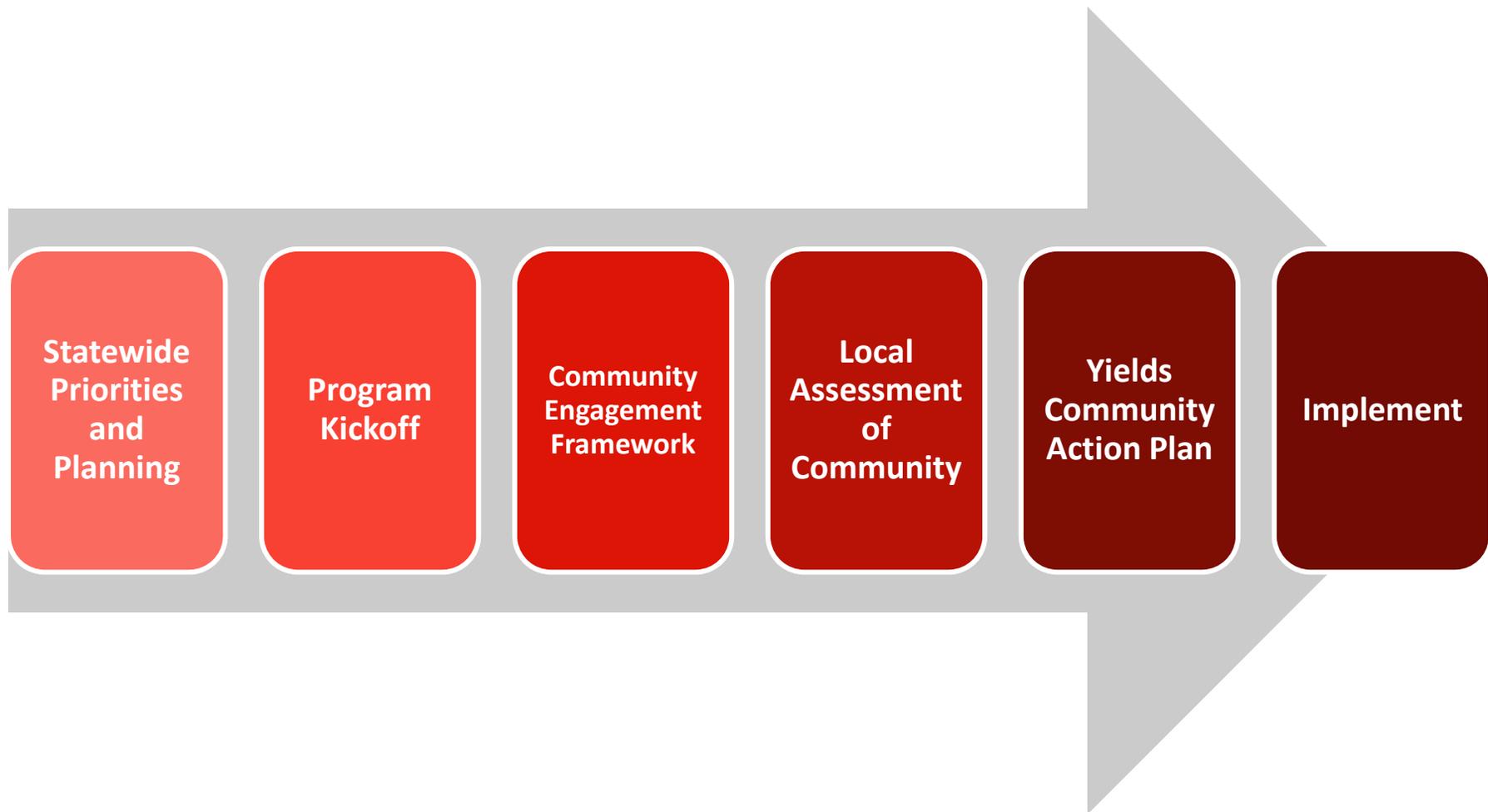
“By 2015, 100 million U.S. homes should have affordable access to actual download speeds of 50 Mbps.”
National Broadband Plan, Goal No. 1

STATEWIDE PLANNING





LOCAL ENGAGEMENTS





ACCESS



ADOPTION



USE

CONNECTEDSM COMMUNITY ENGAGEMENT



ACCESS

Broadband Availability

Broadband Speeds

Broadband Competition

Middle Mile Access

Mobile Broadband Availability



ADOPTION

Digital Literacy

Public Computer Access

Broadband Awareness

Vulnerable Population Focus



USE

Economic Applications

Educational Applications

Healthcare Applications

Government Applications

CONNECTEDSM PROCESS OVERVIEW



- WELCOME
- MY ACCOUNT
- MY COMMUNITY
- MY INVENTORY
- MY ASSESSMENT
- MY RESULTS
- MY RESOURCES
- CONTACT US
- HELP

Community Engagement Portal

Access> Adoption> Use



100%

My Assessments

Each section will have its own specific instructions. This is described in detail below, including the questions to ask throughout the process. Each section of the assessment is expanded to answer several key items including:

- Why is it important?
- How do we measure it?
- Total points possible
- Examples where applicable
- Survey questions (These will help the community to answer the assessment information.)

The Connected program framework is broken into 3 areas: **ACCESS**, **ADOPTION**, and **USE**. Each area has a maximum of 40 points. A community must have 32 points in each section and 100 points out of 120 points overall.

ACCESS

Is the infrastructure there?



ADOPTION

Do residents use the technology available?



USE

Are residents using technology to improve the quality of life?



My Progress

Below reveals your progress level throughout the assessment section. You can click on each sub-section to return to your previous answers.

Comprehensive assessment that engages communities to focus on the pain points

- WELCOME
- MY ACCOUNT
- MY COMMUNITY
- MY INVENTORY
- MY ASSESSMENT
- MY RESULTS
- MY RESOURCES
- CONTACT US
- HELP

Community Engagement Portal

My Results

Community Name: Clare County
 Community Champion: eric.frederick
 Regional Partner: EDC
 Connected Nation Contact: Tom Stephenson

Total Connected Score: 60 / 120

Assessment Name	Total Score	Proposed Projects
Access (40 Total Pts Possible)	25 / 40	View Projects
1 Broadband Availability	2 / 10	
2 Broadband Speeds	3 / 5	
3 Broadband Competition	4 / 5	
4 Middle Mile Access	6 / 10	
5 Mobile Broadband Availability	10 / 10	
Adoption (40 Total Pts Possible)	26 / 40	View Projects
1 Digital Literacy	6 / 10	
2 Public Computer Centers	4 / 10	
3 Broadband Awareness	6 / 10	
4 Vulnerable Population Focus	10 / 10	
Use (40 Total Pts Possible)	9 / 40	View Projects
1 Economic Opportunity	2 / 10	
2 Education	3 / 10	
3 Government	3 / 10	
4 Healthcare	1 / 10	

Transparent results that isolate the growth areas AND identify action items

LOGOUT

- WELCOME
- MY ACCOUNT
- MY COMMUNITY
- MY INVENTORY
- MY ASSESSMENT
- MY RESULTS
- MY RESOURCES
- CONTACT US
- HELP

Proposed Projects by Connected Nation

Initiate a Community Computer Refurbishment or Recycling Program

Customize Action
Remove

Goal: Initiate a computer refurbishment program designed to help recycle computers donated by local businesses, government, schools and other organizations, and then distribute them to low-income households and other households who face affordability barriers to computer ownership. Alternatively, develop a community recycling program to reduce the amount of hazardous materials that may enter the environment.

Project Description: Recruit community members to sanitize old computers and install new software. There are several target groups for performing refurbishments: community volunteers, high school and college students, and prison inmates. Community computer refurbishing provides an opportunity for volunteers and students to gain valuable new skills and training that can be used for career enhancement, and in some cases earn credits for school or college, while reinvesting in their communities. Communities also have the option of using prison inmates to refurbish computers so that they leave prison with some valuable job skills. Alternatively, if the computers are beyond refurbishment, the community can develop a computer recycling program. Recycling and reusing electronic equipment reduces the amount of hazardous materials that may enter the environment. Recycling and reuse programs also reduce the quantities of electronic scrap being landfilled in the state.

Benefits:

- Computer refurbishing programs have shown to be an excellent work force training tool for correctional facilities, young adults, and the mentally and physically challenged. The correctional facility program trains inmates with computer skills that should help them find jobs upon their release.
- The process by which computers and other electronic equipment are refurbished or broken down to their basic parts is called *demanufacturing*. This helps conserve energy and raw materials needed to manufacture new computers and electronic equipment. These parts are then reused in upgrading other computers.

Action Items:

- Develop a model for computer refurbishing or recycling. A basic framework might include:
 - Step 1: Project Planning
 - Determination of minimum computer specifications
 - Acquisition and storage of donated computers
 - Determination and installation of appropriate computer operating system
 - Calculation of costs needed to carry out the program
 - Step 2: Inventory Management
 - Examine how equipment and software will be sorted and managed. Manage your inventory by identifying computers that are ready to be refurbished from those that

Recommended actions and access to solutions to advance broadband benefits to the community

FIRSTNET AND SLIGP

FirstNet Challenges

- Required to consult with State, local and Tribal governments
- Must meet “substantial” rural coverage milestones
- Sustainability: network must be self-sustaining within 10 years

SLIGP Funding Phases

- Phase One: Focus on initial planning and consultation activities, including strategy and timeline development, meetings, governance planning, and **outreach and education** efforts
- Phase Two: Address states’ needs in preparing for additional consultation with FirstNet and planning to undertake **data collection** activities



Connect Michigan

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Executive Director

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www.connectmi.org





About Connect Michigan

- State Broadband Initiative
- Not-for-Profit, Public-Private Partnership, Michigan Public Service Commission
- Statewide Broadband Data Collection, Validation & Mapping
 - **93.38%** participation rate among **127** national and local broadband providers
 - **81.62%** broadband provider service validation
 - Connectivity data for **1,549** individual Community Anchor Institutions
- Statewide Technology Adoption & Use Research: Residents & Businesses
- Technical Assistance (Connectivity Assessment, Field Validation)
- National Adoption Programs (Computers 4 Kids, Every Community Online)
- Community Engagement (“Connected” Community Certification Program)
 - **1,205** stakeholders engaged statewide
 - Facilitating community level Strategic Technology Plans
- Policy Expertise (Connect America Fund, FirstNet, ConnectED)

<http://www.connectmi.org>

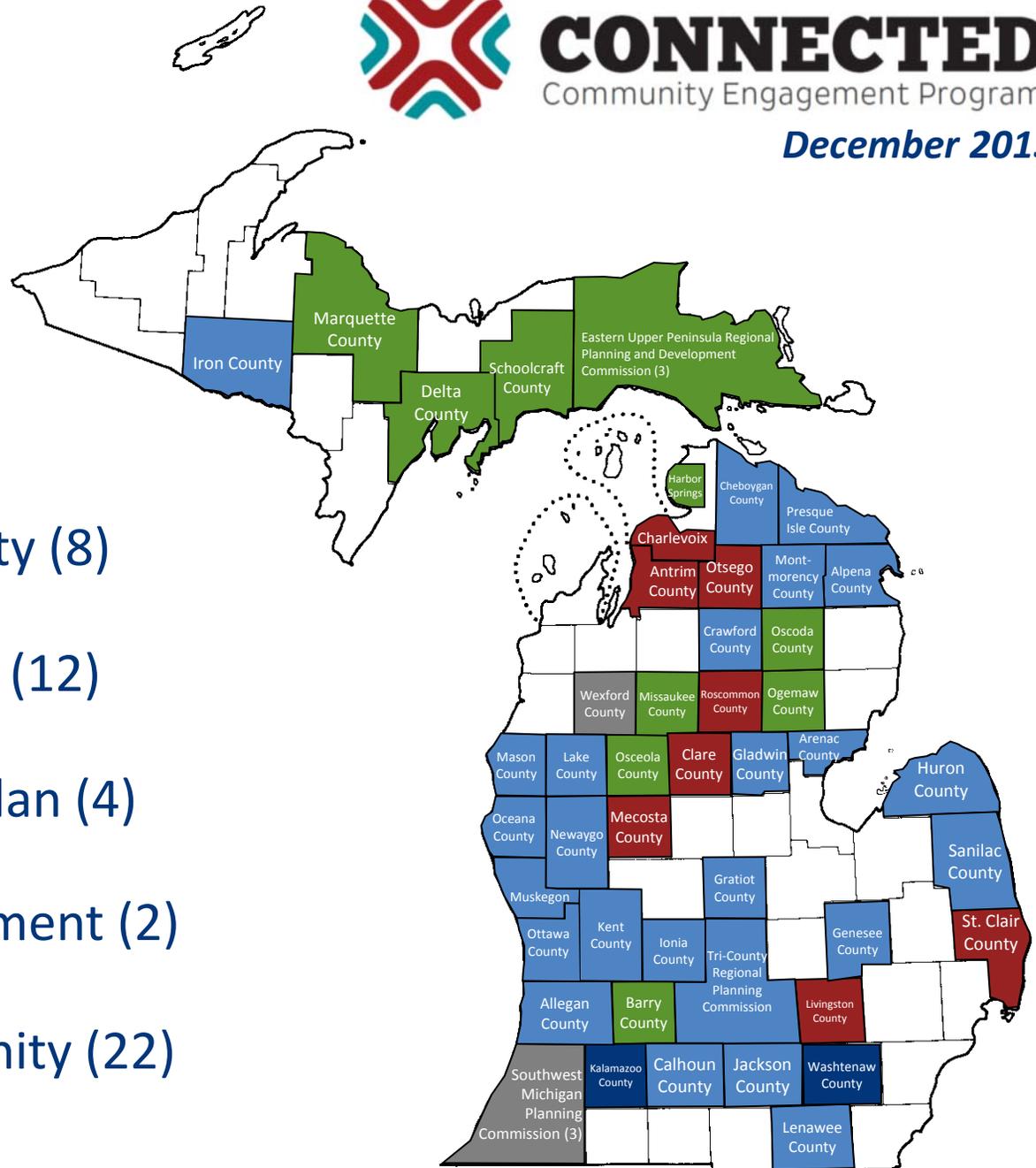


Local Action: Teams

Local assessment looks at infrastructure, adoption, and use while local teams are comprised of many of the following:

- Local Government Officials
- Chamber of Commerce
- Local Economic Development
- School District
- Emergency Management Officials
- Extension Service
- Local tourism
- Local hospital
- Colleges & Universities
- Media outlets
- Public Safety
- Service Providers
- Business Leaders
- Local Libraries
- Non-profit Organizations
- Senior Citizens Center Leader
- Local Farm Bureau
- Health Department
- Public Safety
- Parks department
- Regional planning groups
- Main Street Organizations or DDAs

-  Certified Community (8)
-  Received Final Plan (12)
-  Completing Draft Plan (4)
-  Completing Assessment (2)
-  Interested Community (22)





Our Approach

Public-Private Partnerships

- Customize framework to enlist, coordinate, and collaborate with diverse public and private stakeholder groups
- Promote implementation and advance the broad adoption and use of the statewide integrated public safety communications interoperability system.
- Statewide, public-private “Steering Committee” to engage stakeholders in support of SLIGP efforts, quarterly meetings, annual “summit”, local outreach program



Education and Outreach

Relevancy and Targeted Engagement

- Provide process and purpose (data collection, user ID, peer competition, etc.) for disparate public safety interests to unite around state vision
- Establish a forum for policy translation and briefing in support of state priorities
- Visualize progress, involvement through specialized, interactive data tool
- Make national policy locally relevant through nationwide scale, best practices

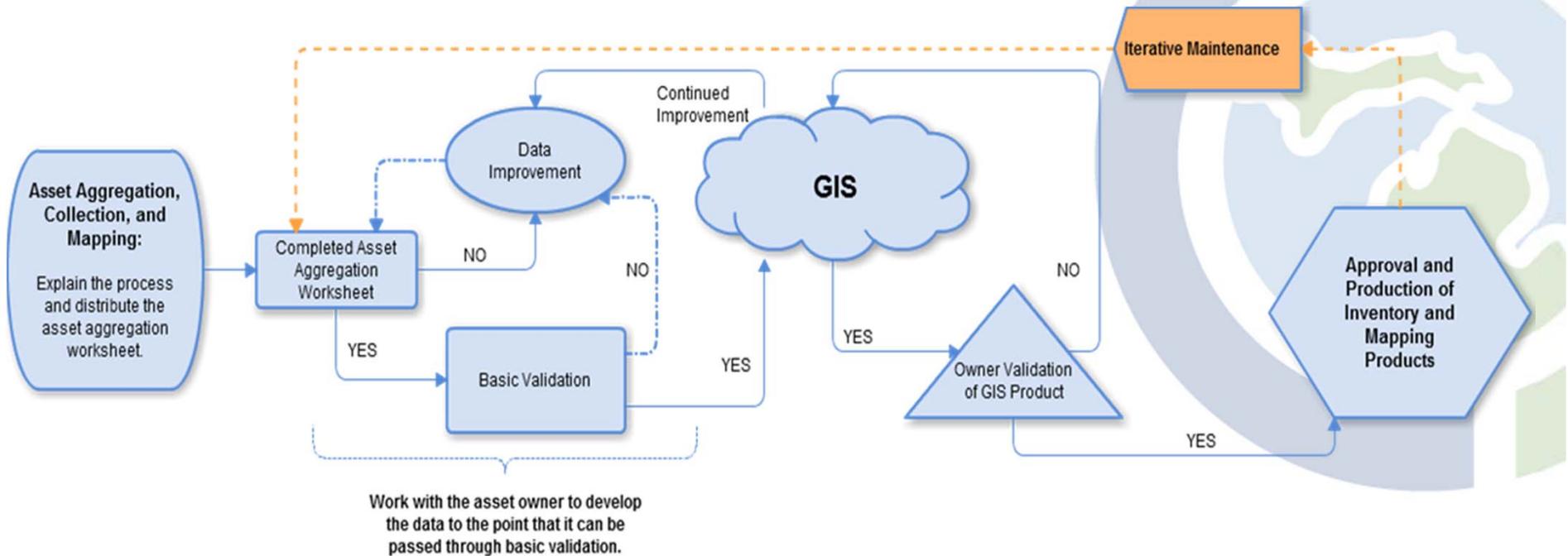
Sustainability

- Cultivate demand by identifying, marketing opportunities to secondary users to secure sustainability goals

Data Collection

Proven methodology and approach for collecting mission critical asset data to fully and confidently inform planning and network engineering.

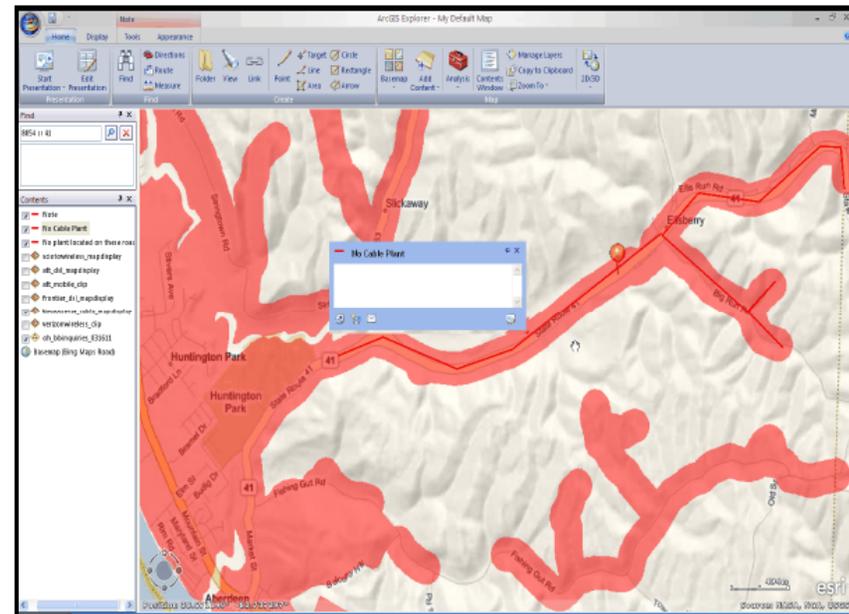
Data Collection → Aggregation → Mapping → Validation





Aggregating Demand Accelerating Deployment

- Consumer contacts Connect Michigan regarding access issues
- Connect Michigan aggregates demand and contacts local providers with cost and technical analysis
- Providers realize last mile solution to provide consumer broadband access





Thank you!

Questions?

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